REMARKS

Favorable reconsideration of this application, in view of the present amendments and in light of the following discussion, is respectfully requested.

After entry of this amendment, Claims 1-2, 4-5 and 7-17 are pending. Claims 1, 4, 7-8, 12 and 16-17 are amended, and claim 6 is canceled without prejudice or disclaimer. No new matter is introduced.[1]

In the outstanding Office Action, Claim 12 was rejected under 35 U.S.C. § 112, first paragraph; Claims 1-2, 4-9 and 12-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Eberbach (U.S. Patent No. 4,885,782) in view of Fujita (U.S. Patent No. 5,812,685); Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Eberbach and Fujita in further view of Packard (U.S. Patent No. 7,035,417); and Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Eberbach and Fujita in further view of Hirade (U.S. Patent No. 7,119,267).

Initially, Claim 12 is amended consistent with the requirements of 35 U.S.C. § 112, first paragraph. Support for the amendment may be found at least in paragraph [0090] of the pregrant publication of this application. Accordingly, it is respectfully requested that the rejection of Claim 12 under 35 U.S.C. § 112, first paragraph, be withdrawn.

With respect to the rejection of Claims 1-2, 4-9 and 12-17 as being unpatentable over Eberbach in view of Fujita, Claim 1 is amended to recite, *inter alia*, an audio signal processing apparatus adapted for delivering an audio signal to a speaker system, which includes:

> a first filter configured to filter at least one input signal to generate the filtered signal, the first filter supplying the filtered signal to the FIR filter, the first filter having a transmission characteristic to localize a sound image at arbitrary positions.

[1] Non-limiting support for the amended claims may be found at least at paragraphs [0082]-[0092] of the pregrant publication of the present application.

The primary reference, Eberbach, describes a loud speaker driver to compensate for relative positioning of a high frequency driver and a low frequency driver.[2] Eberbach illustrates a symmetric driver arrangement including low frequency drivers (22, 24) and a high frequency driver (26) interconnected by a crossover circuit (28) via a delay (30) to provide wide-angle dispersion of sound with accurate phase response.[3] As acknowledged in the outstanding Office Action, Eberbach does not describe the claimed FIR filter.[4] Nevertheless, the outstanding Office Action asserts that this feature is described in Fujita.

Fujita describes a well-balanced polyhedron speaker system to reproduce sound in a spherical pattern.[5] Fujita describes that the polyhedron speaker system includes a DSP (6) that implements a digital filter to correct distortion inherent in each of the individual speakers.[6] More specifically, Fujita describes that the DSP (6) stores filter coefficients corresponding to the inverse correction of the speaker frequency and phase responses in a coefficient memory, and that input signals are processed with the stored coefficients.[7]

However, Fujita does not describe that the coefficients stored in memory provide the FIR filter with a transmission characteristic that locates a sound image at arbitrary positions other than that of the polyhedron speaker system. In fact, Fujita describes that the polyhedron speaker system merely acts as a point source for a spherical audio radiation pattern.[8] Further, Fujita only describes the FIR coefficients as implementing an inverse correction of the speaker frequency and phase responses for the speakers in the polyhedron speaker system.[9] In other words, Fujita merely describes digitally processing a signal to compensate for speaker distortion. Nothing, however, in Fujita describes that the coefficients

[2] Eberbach at column 1, lines 18-45.
[3] Eberbach at column 3, lines 34-45 and Figures 2-3.
[4] See the outstanding Office Action at page 4.
[5] Fujita at column 5, lines 34-58.
[6] Fujita at column 6, lines 19-37 and Figure 4.
[7] Fujita at column 6, lines 33-41.
[8] Fujita at column 1, lines 5-15.
[9] Fujita at column 6, lines 27-37.

provide the FIR filter with a transmission characteristic that locates a sound image at a position other than the polyhedron speaker system itself, much less a transmission characteristic that arbitrarily locates a sound image. Conversely, amended Claim 1 recites a first filter having a transmission characteristic to localize a sound image at *arbitrary positions*. Therefore, Fujita fails to disclose the claimed first filter. Accordingly, amended Claim 1, and any claim depending therefrom, is believed to be in condition for allowance.

As amended Claims 4, 16 and 17 recite features substantially similar to those recited in amended Claim 1, amended Claims 4, 16 and 17 are believed to be in condition for allowance for substantially similar reasons, together with any claim depending therefrom. Accordingly, it is respectfully requested that the rejection of Claims 1-2, 4-9 and 12-17 under 35 U.S.C. § 103(a) be withdrawn.

All other rejections of record rely upon Fujita for describing the above-distinguished features, but as discussed above, the above-distinguished features are not disclosed or suggested by Fujita, alone or in combination with any art of record. Therefore, it is respectfully submitted that a *prima facie* case of obviousness cannot be maintained. Accordingly, it is respectfully requested that the rejection of Claims 10 and 11 under 35 U.S.C. § 103(a) be withdrawn.

For the reasons discussed above, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. Therefore, a Notice of Allowance for Claims 1-2, 4-5 and 7-17 is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.

Bradley D. Lytle
Attorney of Record
Registration No. 40,073

Aldo Martinez
Registration No. 61,357

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/09)

3415838_1.DOC